

# FIELD STUDIES FOR TESTING AND REFINING ATMOSPHERIC DISPERSION MODELS

---

K. Jerry Allwine

Pacific Northwest National Laboratory

# Modeling and Prediction Initiative

## Chemical and Biological Nonproliferation Program

U.S. Department of Energy

Office of Nonproliferation  
and National Security

## OBJECTIVES:

1. Gather field data over full range of transport scales.
2. Identify processes governing dispersion.
3. Provide guidance for validation experiment.

## APPROACH:

1. Add downtown experiment to existing DOE urban to regional-scale field experiment.
2. Conduct 5 intensive meteorological/tracer experiments in SLC during October 2000.
3. Archive and provide data for model efforts.
4. Analyze data and prepare paper.

## FY2000 TASKS:

1. Analyze existing meteorological data.
2. Design field experiment and obtain site permissions.
3. Prepare and procure equipment.  
32 PFT samplers; 3 weather stations;  
3 sonic anemometers; 24 portable  
temperature loggers.









